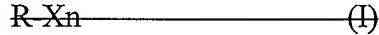


AMENDMENTS TO THE CLAIMS

1. (Currently amended) A process for the preparation of a hydrogenated acrylonitrile-butadiene copolymer comprising the steps of:

hydrogenation of at least one carbon-carbon double bond of an unsaturated acrylonitrile-butadiene copolymer in latex in the presence of hydrazine, an oxidizing compound and a catalyst, followed by

separation of the hydrogenated acrylonitrile-butadiene copolymer from the latex wherein after the separation of the hydrogenated acrylonitrile-butadiene copolymer from the latex a mixing step is carried out in which the hydrogenated acrylonitrile-butadiene copolymer is first mixed with an amine group containing compound and next the hydrogenated acrylonitrile-butadiene copolymer is mixed with a compound that is capable of reacting with an amine, wherein the compound that is capable of reacting with an amine group is a compound according to formula (I):



wherein

~~R is a unit derived from a (C₁-C₂₀)(cyclo)aliphatic group or a (C₆-C₂₀) aryl group,~~

~~X is a unit derived from an epoxide, an anhydride, an isocyanate, an acid chloride and/or a carboxylic acid and~~

~~n=1-5 selected from the group consisting of phthalic acid anhydride, maleic anhydride, acetic anhydride, stearic anhydride, tetrahydrophthalic acid anhydride, cyclohexanedicarboxylic acid anhydride, nadic anhydride and succinic anhydride.~~

2-5. (Canceled)

6. (Previously Presented) The process according to claim 1, wherein the amine group containing compound is an amine according to formula (III):



wherein

R is derived from an aliphatic group comprising at least one C atom or derived from an aromatic group comprising at least 6 C atoms, and

X is a hydrogen atom, NH₂-, OH- or SH-group.

7. (Canceled)

8. (Previously Presented) The process according to claim 1, wherein the catalyst is a compound which contains boron.

9. (Previously Presented) A hydrogenated acrylonitrile-butadiene copolymer obtained by the process according to claim 1.

10. (Canceled)

11. (Previously Presented) An article based on the acrylonitrile-butadiene copolymer according to claim 9.

12. (Previously Presented) The article according to claim 11, wherein the article is applied in the automotive industry, in the oil industry, in the electrical industry, in the engineering industry, in the ship building industry, in household machines, in the paper manufacturing industry or in the cable industry.

13. (Previously Presented) The article according to claim 12, wherein the article is a belt, a hose, a gasket, a boot, a bellow, a vibration damper or a seal.

14. (Canceled)

15. (Previously Presented) A thermoplastic composition comprising a thermoplastic material and a hydrogenated acrylonitrile-butadiene copolymer according to claim 9.

16. (Previously Presented) A thermosetting composition comprising a thermosetting material and a hydrogenated acrylonitrile-butadiene copolymer according to claim 9.